

## CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

- 1 1. A method for developing an order for a product, comprising:
  - 2 establishing an order for a product, wherein said order includes a first
  - 3 component associated with said product and said order includes a non-binding
  - 4 attribute associated with said first component;
  - 5 determining a second component that satisfies said non-binding attribute
  - 6 for said order; and
  - 7 exchanging said first component with said second component in said
  - 8 order.
- 1 2. The method of claim 1, wherein said order comprises a legal contract.
- 1 3. The method of claim 1, wherein said establishing an order for a product includes  
2 at least one of the following:
  - 3 providing a notification to a customer regarding said non-binding
  - 4 attribute;
  - 5 receiving an order for said product;
  - 6 allowing a customer to select a plurality of components for said product,
  - 7 wherein said first component is one of said plurality of components;
  - 8 allowing a customer to select said product and said non-binding attribute;
  - 9 providing a notification to a customer regarding said first component and
  - 10 said second component and receiving consent from said customer to said non-
  - 11 binding attribute;
  - 12 providing at least two options regarding at least one component for said
  - 13 product and allowing a customer to select from among said two options; and

14 providing a request to a customer regarding a non-binding attribute  
15 associated with said first component.

1    4.      The method of claim 1, further comprising:  
2                determining a need for said first component outside said order;

1       5. The method of claim 4, wherein said determining a need for said first component  
2 outside said order includes at least one of the following:

3 receiving a notification regarding a new order that requires said first  
4 component;

5 determining that said order cannot be completely fulfilled due to a  
6 shortage of said first component;

7 receiving a new order that requires an amount of said first component such  
8 that both said order and said new order cannot be filled if both said order and said  
9 new order use said first component;

10 determining that said order cannot be partially or completely filled due to  
11 defects detected in said first component;

12                   determining that a change in price for said first component makes it  
13                   disadvantageous to fill said order with said first component;

14 determining that a change in price for a second component makes it  
15 disadvantageous to fill said order with said first component;

16 determining that a change in projected supply for said first component  
17 makes it disadvantageous to fill said order with said first component;

18 determining that a change in projected supply for a second component  
19 makes it disadvantageous to fill said order with said first component;

20 determining that a projected change in price for said first component  
21 makes it disadvantageous to fill said order with said first component;

determining that a projected change in price for a second component makes it disadvantageous to fill said order with said first component;

24                   establishing a new order that requires said first component; and  
25                   receiving an indication of a potential new order that requires said first  
26                   component.

1       6.     The method of claim 1, wherein said determining a second component that  
2     satisfies said non-binding attribute for said order includes at least one of the following:  
3                   identifying a component that can replace said first component in said  
4     product and satisfy said non-binding attribute;  
5                   selecting said second component from a plurality of components identified  
6     in said order as replacements for said first component;  
7                   receiving a notification of a selection of said second component;  
8                   providing a notification of availability of said second component;  
9                   receiving a request to exchange said first component with said second  
10    component;  
11                   receiving consent to exchange said first component with said second  
12    component;  
13                   providing a notification to a customer of at least one component that  
14    satisfies said non-binding attribute;  
15                   confirming availability of said second component; and  
16                   confirming ability of said second component to satisfy said non-binding  
17    attribute.

1       7.     The method of claim 1, wherein said exchanging said first component with said  
2     second component in said order includes at least one of the following:  
3                   using said second component but not said first component when building  
4     said product;  
5                   fulfilling said order using said second component but not said first  
6     component;

7                 using said second component but not said first component when providing  
8                 said product; and  
9                 including said second component in said product.

1     8.     The method of claim 1, wherein said non-binding attribute relates to at least one  
2     of the following:

3                 a quality level of said first component;  
4                 a performance level of said first component;  
5                 a feature set of said first component;  
6                 a delivery date for said first component;  
7                 a color of said first component;  
8                 a size of said first component;  
9                 a storage capacity of said first component;  
10                 a bandwidth of said first component;  
11                 a weight of said first component;  
12                 a technical capability of said first component;  
13                 an expiration date;  
14                 a purity level;  
15                 a service level;  
16                 a warranty level;  
17                 a price; and  
18                 a dimension associated with said first component.

1     9.     The method of claim 1, further comprising:  
2                 providing a notification regarding said exchanging said first component  
3                 with said second component.

1     10.    The method of claim 1, further comprising:  
2                 fulfilling said order using said second component.

- 1 11. The method of claim 1, further comprising:  
2               adjusting a price associated with said order as a result of said exchanging  
3               said first component with said second component.
- 1 12. The method of claim 11, further comprising:  
2               providing a notification regarding said price.
- 1 13. The method of claim 1, further comprising:  
2               establishing a second order using said first component.
- 1 14. The method of claim 13, wherein said order is established with a first customer  
2 and said second order is established with a second customer.
- 1 15. The method of claim 1, wherein said order identifies at least one characteristic  
2 associated with said product.
- 1 16. The method of claim 15, further comprising:  
2               receiving identification of said at least one characteristic regarding said  
3 order.
- 1 17. The method of claim 15, further comprising:  
2               determining said second component based, at least in part, on said  
3 characteristic.
- 1 18. The method of claim 15, further comprising:  
2               determining said non-binding attribute based, at least in part, on said  
3 characteristic.

1    19.    The method of claim 15, wherein said determining a second component that  
2    satisfies said non-binding attribute for said order includes selecting said second  
3    component based, at last in part, on said characteristic.

1    20.    The method of claim 15, wherein said at least one characteristic includes at least  
2    one of the following:

3                an acceptable lower bound of said at least one characteristic;

4                an acceptable upper bound of said at least one characteristic;

5                a range of acceptable characteristics;

6                a range of unacceptable characteristics;

7                a rule regarding exchange of said first component with said second  
8    component;

9                a condition that must be met if said first component is exchanged with said  
10   second component;

11                a set of at least one acceptable characteristic for said product;

12                a set of at least one acceptable characteristic for said first component;

13                a set of at least one acceptable characteristic for said second component;

14                a set of at least one unacceptable characteristic for said product;

15                a set of at least one unacceptable characteristic for said first component;

16    and

17                a set of at least one unacceptable characteristic for said second component.

1    21.    The method of claim 15, further comprising:

2                identifying said at least one characteristic.

1    22.    The method of claim 15, wherein said at least one characteristic is based on at  
2    least one of the following:

3                volume of said product included in said order;

4                quantity of said product included in said order;

5                         quality of said product;  
6                         quality of said first component;  
7                         quality of said second component;  
8                         demand for said product;  
9                         demand for said first component;  
10                         demand for said second component;  
11                         supply for said product;  
12                         supply for said first component;  
13                         supply for said second component;  
14                         availability of said first component;  
15                         availability of said second component;  
16                         an amount in inventory of said product;  
17                         an amount in inventory of said first component;  
18                         an amount in inventory of said second component;  
19                         an expected profit margin for said product wherein said product includes  
20                         said first component;  
21                         an expected profit margin for said product wherein said product includes  
22                         said second component;  
23                         a discount available for said product;  
24                         a price of said product;  
25                         a price of said first component;  
26                         a price of said second component  
27                         projected demand for said product;  
28                         projected demand for said first component;  
29                         projected demand for said second component;  
30                         projected supply for said product;  
31                         projected supply for said first component;  
32                         projected supply for said second component;  
33                         projected availability of said first component;

34                   projected availability of said second component;  
35                   projected amount in inventory of said product;  
36                   projected amount in inventory of said first component;  
37                   projected amount in inventory of said second component;  
38                   a projected price of said product;  
39                   a projected price of said first component; and  
40                   a projected price of said second component.

1       23.     The method of claim 15, wherein said characteristic is identified by at least one of  
2     the following:

3                   a party placing said order;  
4                   a supplier of said product;  
5                   a supplier of said first component;  
6                   a supplier of said second component;  
7                   an expert system;  
8                   a rule-based system;  
9                   a supply chain management decision support system;  
10                  a supplier relationship management decision support system;  
11                  a production control decision support system;  
12                  a forecasting system;  
13                  an optimization system;  
14                  an order model; and  
15                  a customer model.

1       24.     The method of claim 1, wherein said order specifies different prices for different  
2     configurations of said product.

1       25.     The method of claim 1, further comprising:  
2                  determining said non-binding attribute.

1    26.    The method of claim 1, further comprising:  
2                         providing said product.

1    27.    A method for fulfilling an order for a product, comprising:  
2                         establishing an order, wherein said order identifies an initial configuration  
3                         for a product and at least one non-binding attribute associated with said initial  
4                         configuration;  
5                         after said order is established, determining an alternate configuration for  
6                         said product in accordance with said at least one non-binding attribute; and  
7                         fulfilling said order in accordance with said alternate configuration.

1    28.    The method of claim 27, wherein said establishing an order includes at least one  
2                 of the following:

3                         providing a notification to a customer regarding said non-binding  
4                         attribute;  
5                         receiving an order for said product from a customer;  
6                         receiving a request from a customer for said product in said initial  
7                         configuration;  
8                         allowing a customer to select a plurality of components for said product;  
9                         allowing a customer to select said product and said non-binding attribute;  
10                        allowing a customer to select said product and said initial configuration;  
11                        providing a notification to a customer regarding said initial configuration  
12                        and receiving consent from said customer to said non-binding attribute;  
13                        providing at least two options regarding said initial configuration for said  
14                        product and allowing a customer to select from among said at least two options;  
15                        providing at least two options regarding at least one component for said  
16                        product and allowing a customer to select from among said at least two options;  
17                        providing at least two options regarding said non-binding attribute and  
18                        allowing a customer to select from among said at least two options; and

19 providing a request to a customer regarding said non-binding attribute.

1 29. The method of claim 27, wherein said determining an alternate configuration for  
2 said product in accordance with said at least one non-binding attribute includes at least  
3 one of the following:

4 selecting an alternate configuration permitted in said order;

5 determining a component that can replace another component in the  
6 product and satisfy the non-binding attribute;

7 determining a component that can replace another component in said  
8 product and satisfy said non-binding attribute;

9 receiving a notification of a selection of an alternative component for said  
10 product;

11 receiving consent to exchange said initial configuration with said alternate  
12 configuration;

13 providing a notification of availability of said alternate configuration;

14 receiving a request to exchange said initial configuration with said  
15 alternate configuration;

16 providing a notification to a customer of at least one component that  
17 satisfies said non-binding attribute and is usable in said alternate configuration;

18 providing a notification to a customer of at least one component that is  
19 unavailable for use in said initial configuration;

20 providing a notification to a customer of at least one component that is  
21 available for use in said alternate configuration; and

22 confirming ability of a component to satisfy said non-binding attribute.

1 30. The method of claim 27, wherein said fulfilling said order in accordance with said  
2 alternate configuration includes at least one of the following:

3 providing a notification that said order is provided in accordance with said  
4 alternate configuration;

5                   providing a notification that said product is provided in accordance with  
6                   said alternate configuration;

7                   building said product in accordance with said alternate configuration but  
8                   not said initial configuration;

9                   providing said product in accordance with said alternate configuration but  
10                  not said initial configuration;

11                  providing said order in accordance with said alternate configuration but  
12                  not said initial configuration; and

13                  using a component with said product that is included in said alternate  
14                  configuration but not said initial configuration.

1     31.   The method of claim 27, wherein said order comprises a legal contract

1     32.   The method of claim 27, further comprising:

2                   determining said non-binding attribute.

1     33.   The method of claim 27, further comprising:

2                   adjusting a price associated with said order as a result of said exchanging  
3                   said initial configuration with said alternate configuration.

1     34.   The method of claim 27, wherein said order specifies different prices for different  
2                  configurations of said product.

1     35.   A method for completing an order for a product, comprising:

2                   establishing an order involving a first component, wherein said order  
3                   includes a non-binding attribute associated with said first component;

4                   determining a shortage of an amount of said first component needed to for  
5                   said order;

6                   determining a second component that satisfies said non-binding attribute  
7                   for said order; and

8                   exchanging said first component with said second component for said  
9                   order.

1   36.   The method of claim 35, wherein said establishing an order involving a first  
2   component includes at least one of the following:

3                   providing a notification to a customer regarding said non-binding  
4                   attribute;

5                   receiving an order for a product that includes said first component;

6                   allowing a customer to select a plurality of components for said product,  
7                   wherein said first component is one of said plurality of components;

8                   allowing a customer to select said non-binding attribute;

9                   providing a notification to a customer regarding said first component and  
10                  said second component and receiving consent from said customer to said non-  
11                  binding attribute;

12                  providing a notification to a customer regarding a component and  
13                  receiving consent from the customer to use said component in said order;

14                  providing a notification to a customer regarding a non-binding attribute  
15                  and receiving consent from said customer to use the non-binding attribute in the  
16                  order;

17                  providing at least two options regarding a component and allowing a  
18                  customer to select from among the two options; and

19                  providing a request to a customer regarding a non-binding attribute  
20                  associated with said first component.

1   37.   The method of claim 35, wherein said determining a shortage of an amount of  
2   said first component needed for said order includes at least one of the following:

3 receiving a second order involving said first component, fulfillment of  
4 which prevents fulfillment of said order with said first component;  
5 determining availability of an amount of said first component needed to  
6 fulfill said order;  
7 determining that said order cannot be partially or completely filled due to  
8 defects detected in said first component;  
9 determining that a change in price for said first component makes it  
10 disadvantageous to fill said order with said first component;  
11 determining that a change in price for a second component makes it  
12 disadvantageous to fill said order with said first component;  
13 determining that a change in projected supply for said first component  
14 makes it disadvantageous to fill said order with said first component;  
15 determining that a change in projected supply for a second component  
16 makes it disadvantageous to fill said order with said first component;  
17 determining that a projected change in price for said first component  
18 makes it disadvantageous to fill said order with said first component;  
19 determining that a projected change in price for a second component  
20 makes it disadvantageous to fill said order with said first component;  
21 determining that an amount of said first component needed for said order  
22 exceeds an amount of said first component that is available for said order; and  
23 determining that an amount of said first component needed for said order  
24 exceeds an amount of said first component in inventory.

1 38. The method of claim 35, wherein said order comprises a legal contract.

1 39. The method of claim 35, further comprising:  
2 determining said non-binding attribute.

1 40. The method of claim 35, further comprising:

2                   adjusting a price associated with said order as a result of said exchanging  
3                   said first component with said second component.

1   41.   The method of claim 35, wherein said order specifies different prices for different  
2   configurations of a product associated with said order.

1   42.   A system for facilitating an order for at least one product, comprising:  
2                   a memory;  
3                   a communication port; and  
4                   a processor connected to said memory and said communication port, said  
5                   processor being operative to:

6                         establish an order for a product, wherein said order includes a first  
7                         component associated with said product and said order includes a non-  
8                         binding attribute associated with said first component;  
9                         determine a second component that satisfies said non-binding  
10                         attribute for said order; and  
11                         exchange said first component with said second component in said  
12                         order.

1   43.   A computer program product in a computer readable medium for facilitating an  
2   order for at least one product, comprising:

3                         first instructions for creating an order for a product, wherein said order  
4                         includes a first component associated with said product and said order includes a  
5                         non-binding attribute associated with said first component;

6                         second instructions for identifying a second component that satisfies said  
7                         non-binding attribute for said order; and

8                         third instructions for allowing use of said first component with said second  
9                         component in said order.